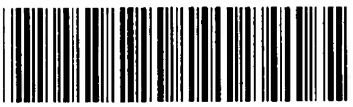

ENTERED

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/054,616A

DATE: 10/31/2002
TIME: 17:06:19

Input Set : A:\033072-022.ST25.txt
Output Set: N:\CRF4\10312002\J054616A.raw

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  3 <110> APPLICANT: Barak, Larry S.
  4       Oakley, Robert H.
  5       Caron, Marc G.
  6       Laporte, Stephane A.
  7       Wilbanks, Alyson
  9 <120> TITLE OF INVENTION: Constitutively Desensitized G Protein-Coupled Receptors
 11 <130> FILE REFERENCE: 033072-022
 13 <140> CURRENT APPLICATION NUMBER: US 10/054,616A
 14 <141> CURRENT FILING DATE: 2002-01-22
 16 <150> PRIOR APPLICATION NUMBER: US 60/263,406
 17 <151> PRIOR FILING DATE: 2001-01-23
 19 <160> NUMBER OF SEQ ID NOS: 12
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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 24 <211> LENGTH: 371
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Homo sapiens
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 31 Pro Ser Leu Pro Ser Asn Ser Ser Gln Glu Arg Pro Leu Asp Thr Arg
 32             20                  25                  30
 33 Asp Pro Leu Leu Ala Arg Ala Glu Leu Ala Leu Leu Ser Ile Val Phe
 34         35                  40                  45
 35 Val Ala Val Ala Leu Ser Asn Gly Leu Val Leu Ala Ala Leu Ala Arg
 36     50                  55                  60
 37 Arg Gly Arg Arg Gly His Trp Ala Pro Ile His Val Phe Ile Gly His
 38 65                  70                  75                  80
 39 Leu Cys Leu Ala Asp Leu Ala Val Ala Leu Phe Gln Val Leu Pro Gln
 40                 85                  90                  95
 41 Leu Ala Trp Lys Ala Thr Asp Arg Phe Arg Gly Pro Asp Ala Leu Cys
 42             100                 105                 110
 43 Arg Ala Val Lys Tyr Leu Gln Met Val Gly Met Tyr Ala Ser Ser Tyr
 44         115                 120                 125
 45 Met Ile Leu Ala Met Thr Leu Asp His His Arg Ala Ile Cys Arg Pro
 46     130                 135                 140
 47 Met Leu Ala Tyr Arg His Gly Ser Gly Ala His Trp Asn Arg Pro Val
 48 145                 150                 155                 160
 49 Leu Val Ala Trp Ala Phe Ser Leu Leu Leu Ser Leu Pro Gln Leu Phe
 50                 165                 170                 175
 51 Ile Phe Ala Gln Arg Asn Val Glu Gly Gly Ser Gly Val Thr Asp Cys
 52             180                 185                 190
 53 Trp Ala Cys Phe Ala Glu Pro Trp Gly Arg Arg Thr Tyr Val Thr Trp
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RAW SEQUENCE LISTING DATE: 10/31/2002
PATENT APPLICATION: US/10/054,616A TIME: 17:06:19

Input Set : A:\033072-022.ST25.txt
Output Set: N:\CRF4\10312002\J054616A.raw

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54          195                 200                 205
55 Ile Ala Leu Met Val Phe Val Ala Pro Thr Leu Gly Ile Ala Ala Cys
56      210                 215                 220
57 Gln Val Leu Ile Phe Arg Glu Ile His Ala Ser Leu Val Pro Gly Pro
58 225                 230                 235                 240
59 Ser Glu Arg Pro Gly Gly Arg Arg Arg Gly Arg Arg Thr Gly Ser Pro
60                 245                 250                 255
61 Gly Glu Gly Ala His Val Ser Ala Ala Val Ala Lys Thr Val Arg Met
62             260                 265                 270
63 Thr Leu Val Ile Val Val Val Tyr Val Leu Cys Trp Ala Pro Phe Phe
64         275                 280                 285
65 Leu Val Gln Leu Trp Ala Ala Trp Asp Pro Glu Ala Pro Leu Glu Gly
66     290                 295                 300
67 Ala Pro Phe Val Leu Leu Met Leu Leu Ala Ser Leu Asn Ser Cys Thr
68 305                 310                 315                 320
69 Asn Pro Trp Ile Tyr Ala Ser Phe Ser Ser Ser Val Ser Ser Glu Leu
70                 325                 330                 335
71 Arg Ser Leu Leu Cys Cys Ala Arg Gly Arg Thr Pro Pro Ser Leu Gly
72             340                 345                 350
73 Pro Gln Asp Gln Ser Cys Thr Thr Ala Ser Ser Ser Leu Ala Lys Asp
74         355                 360                 365
75 Thr Ser Ser
76     370
77 <210> SEQ ID NO: 2
78 <211> LENGTH: 515
79 <212> TYPE: PRT
80 <213> ORGANISM: Golden hamster
81 <400> SEQUENCE: 2
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83  1               5                  10                  15
84 Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser
85             20                  25                  30
86 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val
87         35                  40                  45
88 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile
89     50                  55                  60
90 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr
91 65                  70                  75                  80
92 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe
93                 85                  90                  95
94 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val
95             100                 105                 110
96 Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys
97         115                 120                 125
98 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Glu Tyr
99     130                 135                 140
100 Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg
101 145                 150                 155                 160
102 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile
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RAW SEQUENCE LISTING DATE: 10/31/2002
PATENT APPLICATION: US/10/054,616A TIME: 17:06:19

Input Set : A:\033072-022.ST25.txt
Output Set: N:\CRF4\10312002\J054616A.raw

```
106                 165                 170                 175
107 Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp
108             180                 185                 190
109 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser
110         195                 200                 205
111 Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys
112     210                 215                 220
113 Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly
114 225                 230                 235                 240
115 Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His
116                 245                 250                 255
117 Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly
118             260                 265                 270
119 His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg
120         275                 280                 285
121 Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile
122     290                 295                 300
123 Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe
124 305                 310                 315                 320
125 Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu
126                 325                 330                 335
127 Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser
128             340                 345                 350
129 Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg
130         355                 360                 365
131 Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr
132     370                 375                 380
133 Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser
134 385                 390                 395                 400
135 Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Glu
136                 405                 410                 415
137 Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly
138             420                 425                 430
139 Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly
140         435                 440                 445
141 Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp
142     450                 455                 460
143 Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro
144 465                 470                 475                 480
145 Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp
146                 485                 490                 495
147 Leu Ala Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro
148             500                 505                 510
149 Gly His Phe
150         515
153 <210> SEQ ID NO: 3
154 <211> LENGTH: 515
155 <212> TYPE: PRT
156 <213> ORGANISM. Golden hamster
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/054,616A

DATE: 10/31/2002
TIME: 17:06:19

Input Set : A:\033072-022.ST25.txt
Output Set: N:\CRF4\10312002\J054616A.raw

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Met Asn Pro Asp Leu Asp Thr Gly His Asn Thr Ser Ala Pro Ala Gln
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Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser
20 25 30
Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val
35 40 45
Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile
50 55 60
Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr
65 70 75 80
Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe
85 90 95
Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val
100 105 110
Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys
115 120 125
Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp Ala Tyr
130 135 140
Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg
145 150 155 160
Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile
165 170 175
Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp
180 185 190
Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser
195 200 205
Leu Gly Ser Phe Tyr Ile Pro Leu Ala Val Ile Leu Val Met Tyr Cys
210 215 220
Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly
225 230 235 240
Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His
245 250 255
Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly
260 265 270
His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg
275 280 285
Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Met Phe Ile
290 295 300
Leu Cys Trp Leu Pro Phe Phe Ile Ala Leu Pro Leu Gly Ser Leu Phe
305 310 315 320
Ser Thr Leu Lys Pro Pro Asp Ala Val Phe Lys Val Val Phe Trp Leu
325 330 335
Gly Tyr Phe Asn Ser Cys Leu Asn Pro Ile Ile Tyr Pro Cys Ser Ser
340 345 350
Lys Glu Phe Lys Arg Ala Phe Met Arg Ile Leu Gly Cys Gln Cys Arg
355 360 365
Ser Gly Arg Arg Arg Arg Arg Arg Arg Arg Arg Leu Gly Ala Cys Ala Tyr
370 375 380

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Input Set: A:\033072-022.ST25.txt
Output Set: N:\CRF4\10312002\J054616A.raw

```
207 Thr Tyr Arg Pro Trp Thr Arg Gly Gly Ser Leu Glu Arg Ser Gln Ser
208 385                 390                 395                 400
209 Arg Lys Asp Ser Leu Asp Asp Ser Gly Ser Cys Met Ser Gly Ser Gln
210                 405                 410                 415
211 Arg Thr Leu Pro Ser Ala Ser Pro Ser Pro Gly Tyr Leu Gly Arg Gly
212             420                 425                 430
213 Ala Gln Pro Pro Leu Glu Leu Cys Ala Tyr Pro Glu Trp Lys Ser Gly
214         435                 440                 445
215 Ala Leu Leu Ser Leu Pro Glu Pro Pro Gly Arg Arg Gly Arg Leu Asp
216     450                 455                 460
217 Ser Gly Pro Leu Phe Thr Phe Lys Leu Leu Gly Glu Pro Glu Ser Pro
218 465                 470                 475                 480
219 Gly Thr Glu Gly Asp Ala Ser Asn Gly Gly Cys Asp Ala Thr Thr Asp
220                 485                 490                 495
221 Leu Ala Asn Gly Gln Pro Gly Phe Lys Ser Asn Met Pro Leu Ala Pro
222             500                 505                 510
223 Gly His Phe
224         515
227 <210> SEQ ID NO: 4
228 <211> LENGTH: 515
229 <212> TYPE: PRT
230 <213> ORGANISM: Golden hamster
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235 Trp Gly Glu Leu Lys Asp Ala Asn Phe Thr Gly Pro Asn Gln Thr Ser
236             20                  25                  30
237 Ser Asn Ser Thr Leu Pro Gln Leu Asp Val Thr Arg Ala Ile Ser Val
238         35                  40                  45
239 Gly Leu Val Leu Gly Ala Phe Ile Leu Phe Ala Ile Val Gly Asn Ile
240     50                  55                  60
241 Leu Val Ile Leu Ser Val Ala Cys Asn Arg His Leu Arg Thr Pro Thr
242 65                  70                  75                  80
243 Asn Tyr Phe Ile Val Asn Leu Ala Ile Ala Asp Leu Leu Leu Ser Phe
244                 85                  90                  95
245 Thr Val Leu Pro Phe Ser Ala Thr Leu Glu Val Leu Gly Tyr Trp Val
246             100                 105                 110
247 Leu Gly Arg Ile Phe Cys Asp Ile Trp Ala Ala Val Asp Val Leu Cys
248         115                 120                 125
249 Cys Thr Ala Ser Ile Leu Ser Leu Cys Ala Ile Ser Ile Asp His Tyr
250     130                 135                 140
251 Ile Gly Val Arg Tyr Ser Leu Gln Tyr Pro Thr Leu Val Thr Arg Arg
252 145                 150                 155                 160
253 Lys Ala Ile Leu Ala Leu Leu Ser Val Trp Val Leu Ser Thr Val Ile
254                 165                 170                 175
255 Ser Ile Gly Pro Leu Leu Gly Trp Lys Glu Pro Ala Pro Asn Asp Asp
256             180                 185                 190
257 Lys Glu Cys Gly Val Thr Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser
258         195                 200                 205
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VERIFICATION SUMMARY DATE: 10/31/2002
PATENT APPLICATION: US/10/054,616A TIME: 17:06:20

Input Set : A:\033072-022.ST25.txt
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